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PAT 2000-013515

Compression device for ultrasonic or radiographic TI: mammography PN: W09956623-A1 PD: 11.11.1999 NOVELTY - The object to be examined in compressed between AB: compression plates with the examination space located between the plates. The entrance to the examination space is covered by an elastic foil. Interior space is filled with liquid which has size and form altered by foil by displacement of liquid. DETAILED DESCRIPTION - The device has two compression plates positioned at a certain distance apart by adjustment device. The examination space is located between the two plates and is accessible via an opening (14) for the breast (3) to be examined. A size-variable wall (11A) is connected to the plates at the side away from the entrance opening so that the entrance opening is bordered by the plates and the size variable wall between the plates. The wall is liquid imperviously connected with the plates and has bellow walls. The entrance opening is covered, liquid imperviously by an elastic foil (4) which provides a flat surface when stretched. Liquid tight interior space (5) has its form and size varied by the foil. The foil is connected with a bar element (26) to provide space to fit the breast between the compression plates and to match the examination space to the breast. The bar element pulls (10B) the foil from the entrance opening into the interior space to displace an amount of liquid from the interior space and so provide a large enough examination space (2) for the breast. After positioning, compression is initiated by changing the amount of liquid in the interior space so the elastic foil is completely in contact with breast surface. The bar provides a link leading into the foil with a vacuum pump (28) connected to the outer end of the link.; USE - Compression device for use in ultrasonic or radiographic mammogram. ADVANTAGE - Prevents formation of artifacts, minimizes border surfaces. DESCRIPTION OF DRAWING(S) - The drawing shows a section of the bell shaped foil with object to be examined. Breast 3 Elastic foil 4 Interior space 5 Size variable wall 11A Bar element 26 Vacuum pump 28 (ASTA ) ASTA MEDICA AG; (RICH/) RICHTER K; PA: RICHTER K; BECKERS T; BOEHMER F D; DE WALL S; HUFSKY H; IN: MAHBOOBI S; PONGRATZ H; POPP A; TELLER S; UECKER A; WO9956623-A1 11.11.1999; ZA200006152-A 26.06.2002; FA: DE19921100-A1 02.03.2000; AT; BE; CA; CH; CN; CY; DE; DK; ES; FI; FR; GB; GR; IE; IN; CO: IT; JP; KR; LU; MC; MX; NL; PT; SE; US; WO; ZA; CA; CN; IN; JP; KR; MX; US; DR: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; IC: A61B-006/04; A61B-008/08; C07D-000/00; MC: S05-X; DC: P31; S05; FN: 2000013515.gif DE1019645 05.05.1998; DE1019838 05.05.1998; DE1019853 05.05.1998; DE1021100 03.05.1999; FP: 11.11.1999 UP: 09.08.2002

